Techniques of Identifying and Evaluating Corridors and Trails

Archeological Property Types as Contributing Elements

Timothy R. Nowak

A significant part of the historical landscape of corridors and trails is the associated cultural remains of those who have used these transportation routes over time. These remains, found both above and below the ground, are the tangible historic resources which link the corridor or trail to its historic context. They are the elements which serve to substantiate and illuminate the historical research which forms the framework for understanding the events, activities, and socio-cultural patterns which influenced the route.

Archeology, however, does not merely serve as the handmaiden to history. Beyond being a technical methodology, archeology, as a subdiscipline of anthropology, offers a unique theoretical perspective. It provides an analytical approach to material culture and spatial configuration and raises questions of behavioral patterning with regard to environmental and economic issues, social interaction, and culture process, all of which should be important to development of the historic context of the corridor.

Keep in mind that the location of any event or activity has the potential to provide archeological data, whether it be where someone lost a few coins from their pocket at some spot along a trail or whether it be where entrepreneurs constructed a ferry and roadhouse at a major stream crossing. Both are related to the corridor or trail in question. But unlike the first example which is random and isolated, the second example likely contains a pattern of associated structures and activity areas, and is certainly more significant in terms of the kind of information it can provide.

As with most cultural remains, these patterned features, which we identify as property types, are often related by shared physical or associative characteristics. Physical characteristics may relate to structural forms, architectural styles, or site types, whereas associative characteristics may relate to the nature of associated events or activities. At one level, historic corridors and trails are, themselves, property types. These include emigrant routes, cattle drive trails, federally-funded wagon roads, land grant military wagon roads, railroads, canals, river margins, national boundaries, and highways. But they can be identified and described by other, more numerous property types which collectively, define the corridor or trail.

A property type may include the remains of a variety of buildings and structures with diverse physical characteristics or functions; it may also include any number of non-structural features, such as blaze marks, graves, privies, dumps or trash scatters. This can be illustrated by the Union Pacific Railroad corridor which formed the first transcontinental railroad line extending from Omaha, NE, to its connection point with the Central Pacific Railroad at Promontory Point in Utah. This corridor comprises not only preserved abandoned portions of the original railroad grade, it also includes the locations of construction camps, division points, section stations, and sidings. In turn, each of these property types are defined by other property types and features, such as water towers, bunk houses, bake ovens, depot buildings, round houses, privies, and even graves, just to name a few. Other property types which contribute to defining the railroad corridor may include tunnels, trestles, snow sheds, tie camps, etc. More intangible sites, which would not normally be manifested in archeological remains but would contribute to the historic context, would be the sites of train wrecks or train robberies.

The identification of property types ultimately depends upon the identification of feature functions. Archeologists have traditionally depended upon three sets of variables to identify these functions: artifact assemblage, feature form, and feature location.

Functional analysis of property types might begin with a determination of the range of feature types that could conceivably have existed. Archeological property types can sometimes be found based upon our predictions of what resources likely existed at a given place and time; very often they are discovered during archeological inventory surveys; most frequently they are located as the result of historical research. In the last case, this does not necessarily insure that the property type was really there or that it still exists. The bottom line is that archaeological property types must be positively identified in the field. The problem with archeological property types, however, is that they are not often manifested as easily recognizable features. The remains of structures may be observed as merely depressions in the ground, subtle changes in vegetation, the surface patterning of artifacts, or sometimes as only a slight difference in soil phosphates.

Of the three sets of variables previously mentioned, the analysis of artifact assemblages associated with specific features should initially provide the most reliable data for the identification of feature function. This is due, in part, to the fact that archeologists have historically expended greater effort in the analysis and interpretation of artifacts than in the analysis of feature form or location. Unfortunately, many artifact assemblages are often too small to be useful or they may contain materials that will yield ambiguous information that is not diagnostic in terms of artifact function or social diversity and, therefore, provide little information relating to feature function. In such instances feature form (i.e., structural attributes) and feature location may be used to supplement feature function identification.

Once all of the observable features of an archeological site have been inventoried, they must be described

and evaluated. This includes the types and quantities of both artifacts and features. Usually the features fall into three broad categories of property types: those that contribute to the historic significance of the property, i.e., the features that were present during the period of time that the property achieved its significance; those that are non-contributory or existed before or after the period of time the property achieved its significance; and those problematical features which cannot be readily determined to be either contributory or non-contributory. These latter features will probably require subsurface testing or the use of remote sensing techniques to answer that particular question. The types and quantities of contributing artifacts and features, in conjunction with historical research data and integrity, are the foundation for evaluating the significance of the property.

All aspects of the property should be documented, including standing structures and buildings, as well as small-scale elements, such as trail ruts, stone fence lines, individual trees which may have been planted during the period of significant occupation, footpaths, etc. If they contribute to the significance of the property, structures and small-scale elements should not be described and evaluated separate from their archeological deposits.

It is also important that the boundaries or horizontal extent of the property be defined and that all resources within those boundaries have been inventoried and described. Boundaries of historical archeological properties may be based on one or more factors. Some of the more commonly used include: absence of artifacts and features or a significant decline in surface and subsurface artifact density; natural topographic or hydrological features such as a river or steep-sided drainage; historical or legal boundaries associated with the property; or land disturbance, such as construction or erosion, which has adversely affected portions of the property.

The first step in evaluating historic archeological properties is a determination of the site's integrity. This is a measure of the amount of interpretable physical remains and the quality of the information retained within the property. Two aspects of these remains must be considered: focus and visibility. Focus is the degree to which a pattern of the physical remains can be "read" clearly as to how it represents the remains of a structure or an activity area. Visibility refers to the actual amount of physical remains, however clearly or ambiguously they might be perceived.

Since this information cannot be exactly determined without extensive excavation, the integrity of the archeological property is usually estimated based upon the apparent "intactness" of the archeological record. This is most often demonstrated by the lack of serious disturbance to the property's archeological deposits and observation of spatial patterning of both surface and subsurface artifacts and features that represent differential uses or activities. Above-ground patterning of features and artifacts may indicate that below-ground patterning is still intact.

It is important to keep in mind that if significant information is still retrievable despite some disturbance, then the property may still have integrity. In other words, what is important is that the horizontal and vertical patterning of the archeological remains is discernible and that significant data can be recovered.

If it is determined that the archeological property has integrity, then it must next be demonstrated that the property has information potential relative to the research questions that are important. This is perhaps the most critical issue in evaluating the site. It is not enough that the archeological property will likely yield information—the real question is whether that information is important to our understanding of the site and of the overall historical context of the corridor or trail. On the other hand, it is important to note that the information potential of historic archeological sites does not necessarily decline in relation to the amount of written historical information. Archeological data cannot only substantiate the written record, but the remains of material culture often provides truths and insights to social behavior not commonly or accurately documented.

The key to evaluating historic archeological properties is directly related to the data gaps and information needs defined by the historic context. This process can be outlined as follows:

- Identify research questions applicable to the corridor or trail and to the associated property types.
- Justify that the research questions are important.
- Determine the data categories that are needed to answer the research questions .
- Confirm that the data is likely to be in the site to answer the research questions .
- Demonstrate that the property does not contain information that is typical or that is provided by other similar sites.

After these steps have been completed, it is now possible to further evaluate the historical archeological property in terms of National Register criteria. Certainly, if all of the previous five steps have been well documented, then the property can be deemed significant in that it may likely yield information important in history. This is Criterion D under which most archeological properties are evaluated.

Historic archeological properties, however, may also be evaluated under the other criteria. For example, historic archeological property types that have good archeological integrity and are associated with important historical events are significant under Criterion A (e.g., Big Horn National Battlefield). Historic archeological property types that have good integrity and are associated with important persons are significant under Criterion B (e.g., Brigham Young's privy at Nauvoo, IL). Historic archeological property types that have good integrity and illustrate a type, period, or method of construction are significant under Criterion C (e.g., the ruins of an Overland Trail stage station). Often, the property type will have significance under a combination of these criteria.

Timothy R. Nowak is the district archeologist, Rawlins District, Bureau of Land Management, Rawlins, WY.